Commonwealth of Kentucky
Division for Air Quality

PERMIT STATEMENT OF BASIS

Title V proposed permit No. V-98-038
PROGRESS RAIL SERVICES CORPORATION
COVINGTON, KY
June 2, 2000
JILL BERTELSON, REVIEWER
Plant I.D. 079-2020-0154
Application Log # E860

RESPONSE TO COMMENTS:

1. *Progress Rail maintains that hourly visible emissions inspections during startup, shutdown, malfunction, or when the baghouse or filter banks are not working properly as defined in the permit by pressure drop or flowrate and visible emissions are not necessary for compliance with the opacity standard since there are no visible emissions during normal operation.*

   Startup, shutdown, and malfunction are not normal operation and therefore continuous compliance with the opacity standards by proper operation of the baghouse or filter banks cannot be ensured. If the baghouse or filter banks are not operating properly according to the pressure drop-visible emissions or flowrate-visible emissions definitions, continuous compliance also cannot be ensured. Therefore, another method, such as hourly observations, is needed to determine compliance with the opacity standards only when the grit blast booth or spray paint booth is operating during startup, shutdown, and malfunction. The permit conditions are unchanged.

2. *Progress Rail maintains that the grit blast booth baghouse design is not conducive to Method 5 stack testing at the inlet and outlet of the baghouse. They feel that they can demonstrate compliance by other methods such as calculations using manufacturer's guaranteed efficiencies and better emission factors and that the stack tests should not be required.*

   During a plant site visit it was determined that the test data that was submitted in the application and used as the basis for particulate emission factor calculations was from another plant and was probably not representative of their actual emissions which they believe are much lower given the fact that visible emissions were rarely seen at the baghouse exhaust. Progress Rail explored other methods of determining particulate emission factors including weighing the dust collected in the hopper at the bottom of the baghouse and relating that to the number of railcars blasted during filling of the dust hopper, and having the system analyzed by U.S. Filter which provided them with maximum emissions based on the design of the grit blast booth and baghouse. The permit and emissions calculations have been changed to use the newer U.S. Filter data. A recordkeeping requirement for the number of railcars blasted was added to the permit. Progress Rail also averaged recent OSHA personnel grab samples in the blast booth for metals composition in order to calculate lead and cadmium emissions on an hourly or per car basis. Progress Rail also agreed to use in the baghouse only the baghouse cartridges tested by the baghouse manufacturer in order to use the manufacturer's guaranteed efficiencies in the emissions calculations. The new emissions are much lower than the allowables so a reference

method compliance demonstration and stack testing to determine efficiency are no longer required in the permit. The equation for calculating the particulate hourly allowable and the particulate actual emissions has been changed to reflect the new emission factors. Recordkeeping and reporting permit conditions have been changed accordingly.

3. *Progress Rail maintains that the emissions calculations in the permit should be reviewed. They seem unclear.*

   The emissions calculations have been changed to reflect the new emission factors. The equation for the allowable emissions limit in the grit blast booth has been removed and only the final result of the calculation has been included in the permit since each "batch" is 1 hour and the equation would not change from any given "batch" to the next.

4. *Progress Rail believes that a continuous alarm or continuous strip recorder on the pressure drop gauge of the grit blast booth baghouse is unnecessary and suggest that the permit should require daily manual pressure drop recording and daily qualitative visible emissions observations.*

   Progress Rail currently checks the pressure drop gauge on the blast booth baghouse every day and has had no problems with this monitoring method. The permit reviewer checked the August 1998 *Technical Guidance Document: Compliance Assurance Monitoring* for what the probable CAM requirements would be for the baghouse if it is determined to be subject to CAM upon permit renewal. Example A.10 appears to be the closest situation to Progress Rail's grit blast booth, and it requires daily qualitative visible emissions observations and daily manual pressure drop recordings. The permit is changed to require these conditions. Recordkeeping and reporting permit conditions have been changed accordingly.

5. *Progress Rail believes that determining the range of pressure drops allowed for determining compliance on the baghouse should be determined by a method other than stack testing.*

   The minimum pressure drop across the baghouse would occur immediately after all clean bags have been installed in the baghouse. Since Progress Rail is planning to change the bags in the next couple of months, the permit is amended to set the first pressure drop measured after the bags are changed (so long as there are no visible emissions) as the minimum allowed pressure drop. A Compliance Schedule permit condition has been included so that Progress Rail would not determine compliance with the particulate and pressure drop standards until the bags are changed since the allowed pressure drop values won't be known before then.

6. *Progress Rail maintains that the paint spray booth design is not conducive to Method 5 stack testing at the inlets and outlets of the filter banks. They feel that they can demonstrate compliance by other methods such as calculations using manufacturer's guaranteed efficiencies and better emission factors and that the stack tests should not be required.*

   Progress Rail no longer uses most of the paints that were submitted in their application and on which the particulate emission factor was based. They now only use 3 paints which have a much lower solids content, so their hourly particulate potential emissions are now much lower than the allowable. Visible emissions were rarely seen at the filter bank exhaust. Progress Rail also agreed to use in the filter banks only the filters tested by the filter bank manufacturer in order to use the manufacturer's guaranteed efficiencies in the emissions calculations. The new emissions are much lower than the allowables so a reference method compliance demonstration and stack

testing to determine efficiency are no longer required in the permit. Recordkeeping and reporting permit conditions have been changed accordingly.

7. *Progress Rail maintains that measuring pressure drop across the filter bank is very difficult by its design. They suggest using flowrate as the monitoring parameter since they have been doing this in the past in order to determine whether or not the filters should be changed. They also suggest doing weekly flowrate measurements instead of daily.*

   Progress Rail has been using a hand held flowmeter in the spray paint booth to determine when to change the filters. They already have a 100 fpm minimum flowrate at which they will automatically change the filters. The permit has been changed to require monitoring of the flowrate for the filter banks instead of measuring the pressure drop and includes the 100 fpm minimum flowrate that they currently use as the trigger mechanism for changing the filters. The requirement for daily measurements is unchanged since the filters could be damaged or adjusted by personnel or equipment at any time and a daily measurement would catch this more frequently than weekly measurements. Recordkeeping and reporting permit conditions have been changed accordingly.

8. *Progress Rail believes that determining the range of pressure drops allowed for determining compliance on the spray paint booth filter banks should be determined by a method other than stack testing.*

   The permit has been changed to use the 100 fpm minimum flowrate in the response to Comment 7. above.

9. *Progress Rail believes that a continuous alarm or continuous strip recorder on a pressure drop gauge of the spray paint booth filter banks is unnecessary and suggest that the permit should require daily manual pressure drop recording and daily qualitative visible emissions observations.*

   Monitoring of pressure drops is no longer required. The permit is changed to require daily flowmeter measurements and daily qualitative emissions observations. See the response to Comment 4. above.

10. *Progress Rail maintains that the design of the stencil room and new shop are not suitable for Reference Method 5 or opacity testing which should be performed only when the Division requires performance testing. They request that these permit conditions be removed since compliance can be determined through recordkeeping and calculations.*

    The Reference Method and opacity requirements are taken directly from the regulations and may never be required to be performed since emissions can be estimated through recordkeeping and calculations. However, this is not a reason to exempt this source from performance testing. The permit conditions also state that equivalent methods may be used instead of the stated testing methods. Both rooms have exhaust vents or stacks where an opacity or visible emissions test could be performed. The permit conditions are unchanged. Any other testing problems can be addressed at any time that the Division requires testing.

11. The address for the Division's Florence Regional Office has been changed due to a new location.